

Appendix A: Interim Comprehensive Conservation Plan

Introduction

The following Interim Comprehensive Conservation Plan (ICCP) was developed as a general guideline for how the proposed Glacial Ridge National Wildlife Refuge would be managed over the course of the next several years until a full plan can be completed. The ICCP does not present extensive detail about where facilities would be located, the timing of restoration actions, hunting opportunities, etc. All of these details would be a part of a future Comprehensive Conservation Plan developed with public input and in compliance with the National Environmental Policy Act and Service policies. However, this ICCP does attempt to answer some basic questions that may be posed by area landowners and others about future refuge management. Please see the Environmental Assessment for more details about the study area and existing land uses.

The proposed 45,700-acre Glacial Ridge National Wildlife Refuge would eventually restore at least 13,000 acres of drained wetland basins and nearly 20,000 acres of tallgrass prairie habitat. The restored land would provide important breeding habitat for waterfowl, sandhill cranes, shorebirds and prairie chickens. The project would also improve water quality for local fisheries and decrease downstream flooding. The land would be managed to benefit wildlife as well as people.

Goals of the proposed Glacial Ridge National Wildlife Refuge:

- Strive to maintain diversity and increase abundance of waterfowl and other migratory bird species dependent on prairie wetland and grassland habitats.
- Conserve, manage, and restore the diversity and viability of native fish, wildlife and plant populations associated with tallgrass prairie and prairie wetlands.
- Work in partnership with others to restore or enhance native tallgrass prairie, prairie wetlands and unique plant communities.
- Restore, enhance, and protect water quality and quantity that approaches natural hydrologic functions.
- Provide for compatible wildlife-dependent recreational uses by the public, emphasizing increased public understanding of the northern tallgrass prairie ecosystem and the mission of the National Wildlife Refuge System.

Refuge Management

Refuge management refers to all aspects of refuge operations including habitat restoration, equipment, personnel, facility maintenance and visitor services.

A. Water Management

The natural hydrology and ecological dynamics of the study area have been changed during recent years to facilitate agriculture production. A series of large judicial ditches and drainage tile lines have been installed throughout the area. The result of draining the wetland basins between the glacial ridges is a loss in biological diversity and natural integrity of the landscape.

Water management is a crucial component of refuge habitat management. Generally, water management involves restoring historic wetland basins and controlling water levels. Artificial control by humans can mimic the natural cycles to promote habitat for all living creatures. The conversion of agriculture fields to restored wetlands is accomplished by using the same equipment that was used to drain the wet areas for agriculture. Ditches are filled, tile lines are plugged or removed and water control structures are installed.

The Service proposes to eventually restore all of the natural wetland basins within the refuge boundaries. Restorations may also occur on adjoining land with the permission of landowners or through a cooperative effort. It is our intent to have no impact on drainage from neighboring lands and to follow state laws regarding drainage activities. Restoration work may require close coordination with adjacent landowners and drainage districts.

B. Upland Management

Upland found on the proposed refuge includes grasslands, shrublands, croplands and small woodlots. Maintaining the existing native grasslands and restoring former prairies will be a primary focus of future land managers. Service refuge managers and biologists have extensive backgrounds in restoring and enhancing these types of landscapes for wildlife and their habitats. Habitat diversity will ultimately be addressed to ensure healthy populations of wildlife, especially the declining species of grassland birds and animals. A mosaic of habitats comprised of restored native prairie grasslands, wetlands, shrub areas, as well as croplands will serve wildlife a bounty of food, water, shelter, and space.

Grasslands are restored by planting a mixture of native grass seeds and forbs. This mixture may include species such as big and little blue stem, switchgrass, side-oats gramma, Indian grass, black-eyed susans, cone flowers and prairie clover. Burning, haying and grazing are all common methods used to maintain a native prairie grassland. Prescribed fire is an especially useful tool to stimulate native prairie grasses, reduce woody and undesirable vegetation, and “setback” ecological succession.

Currently, pasture and croplands, including cultivated row crop fields, alfalfa, and agricultural lands enrolled in the Conservation Reserve Program, encompass over 80% of the study area. The cultivated fields are planted primarily to soybeans or wheat. Additional tracts of tallgrass prairie have been cleared of boulders to facilitate future cultivation. In addition, a few wooded areas are scattered throughout the study area; mostly on state lands. Although most refuge uplands would be managed as grassland some shrub and tree cover will remain on the landscape. Native shrub and tree cover will be encouraged and maintained along flowing water courses to provide shade and protect against bank erosion.

C. Maintenance of Current Drainage Patterns

It is Service policy not to impede the flow of waters from other lands, even if such flow passes through refuge lands. The Service's intent is to have no impact on drainage from neighboring lands and to follow state laws regarding drainage activities. Service staff work with adjacent landowners and drainage districts to ensure that existing drainage

facilities or patterns are not negatively impacted by refuge activity. Detailed hydrologic designing will be undertaken for all water-related activities on Service lands to ensure that our activities do not alter drainage in any way that would cause flooding or drainage problems to private lands.

The Service would not cause any artificial increase of the natural level, width, or flow of waters without ensuring that the impact would be limited to lands in which we have acquired an appropriate real estate interest from a willing seller (e.g., fee title ownership, flowage easement, cooperative agreement). The Service would comply with all Federal and state regulations regarding development, some of which are specifically intended to ensure that the actions of one landowner do not adversely affect another. If Service activities inadvertently created a water-related problem for any private landowner (flooding, soil saturation or deleterious increase in water table height, etc.) the problem would be corrected at the agency's expense.

Through the Partner's for Fish and Wildlife Program, the Service has restored over 10,000 wetland in the Great Lakes - Big Rivers Region, which includes Minnesota. The expertise gained through this experience and by coordinating with partners in the North American Waterfowl Management Plan, the Minnesota Department of Natural Resources, the Natural Resource Conservation Service, and others, will help us achieve the wetland goals of this refuge and not adversely effect others. The Service will coordinate any management activities that may effect the current drainage pattern with county boards or the drainage district. Drainage districts are local government districts, which are organized to drain lands for agriculture or other purposes. Land is drained by drainage ditches which cross individual property boundaries. Landowners in a district who benefit from drainage must pay assessments to cover the cost of constructing, maintaining, and repairing the drainage system.

D. Fire Management and Fire Suppression

Fire has been a part of natural ecosystems since the origin of plant communities on earth. Fire management is a useful tool for managers to stimulate native prairie grasses, reduce woody and undesirable vegetation, and "setback" ecological succession. The role of fire has proven itself when alternative management tools are environmentally unacceptable (example: chemical treatments), are not effective, or are too expensive. Safety aspects of using prescribed fire are uppermost on everyone's minds. For this reason, biologists and managers are extensively trained and use special equipment for any prescribed fire or controlled burning. Staffed refuges have their own fire equipment including such items as pumper units, hand tools, drip torches and radio systems. Fire management plans specify the parameters for who, when, why, where, and how the burn will be conducted. Smoke management and contingency plans are described in detail. Every effort for the protection of life and property is made during planning and fire activities.

Wildfires, on the other hand, are unplanned fires that are caused by lightening strikes, railroads, humans, etc. that require quick response from professional fire fighters. The fire management plan addresses wildfire initial attack and incident response. Cooperative agreements coordinated with local and volunteer fire departments are arranged before a need arises.

Law Enforcement

Law Enforcement is a cooperative effort by several agencies. Some Service employees are trained and commissioned to conduct law enforcement duties on Federal property and enforce certain Federal laws. This enforcement activity is primarily focused on the protection of refuge fish and wildlife resources, and on the protection of refuge visitors and their possessions from disturbance or harm by other visitors or themselves. The Service also relies on the cooperative law enforcement efforts of state conservation officers and county sheriff departments.

Refuge Administration

The proposed Glacial Ridge NWR could be administered in several ways depending on the pace of refuge development. In beginning stages, the new refuge could be managed administratively as a satellite refuge by an existing national wildlife refuge (Rydell) or wetland management district (Detroit Lakes WMD). As the restored land base increases, the complexity of habitat management and administration also increases, and the new refuge would probably be assigned its own funding, equipment, and staff. Speaking very generally, a fully staffed refuge of this size could eventually have about seven staff members and an annual operating budget of approximately \$700,000.

Public Use Opportunities and Management

The following is a discussion of potential recreational opportunities that may be available to the public if the proposed refuge becomes a reality. In this interim plan, we do not describe public use activities in detail, or pinpoint exact locations of facilities or access points that will be needed to facilitate public uses. Rather, this discussion will paint a general picture of the kinds of activities the public can expect to enjoy. Decisions about exact locations for facilities and programs will be made with public input, and will be described in detail in the future Comprehensive Conservation Plan. As on all National Wildlife Refuges, before any public use can be allowed on the proposed Glacial Ridge National Wildlife Refuge, the use must first be determined to be compatible with the refuge's purposes. These use-specific compatibility determination will be made as part of subsequent refuge management plans. A pre-acquisition compatibility determination has been prepared as a part of the environmental assessment.

While National Wildlife Refuges are managed first and foremost for the conservation of fish, wildlife, and plants, through careful planning and regulation, refuges can provide the public with a variety of diverse and rewarding opportunities for wildlife dependent recreation. Wildlife-dependent recreation, as defined by the National Wildlife Refuge System Improvement Act of 1997 (P.L. 105-57), includes hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation. These are the priority public uses of the National Wildlife Refuge System, and of the proposed Glacial Ridge National Wildlife Refuge. Through participation in these activities, visitors to the refuge will gain an appreciation for healthy habitats and the fish and wildlife populations they support.

Trapping, while not a priority wildlife-dependent recreational activity, is often a practical wildlife management tool used on many refuges. Populations of beaver, muskrat and other mammals can exceed the carrying capacity of available habitat or cause damage to water control structures. Trapping is one means that could be used to control their numbers. Before we would allow any public trapping on the refuge, we would prepare a Furbearer Management Plan with the public's involvement.

A. Hunting

Following completion of a Refuge Hunt Plan it is expected that hunting for small and big game would occur on much of the refuge. The planning is expected to be completed prior to any land acquisition, so hunting could be permitted as soon as sufficient lands and public access points are acquired. Hunter access parking lots could be located at several convenient and safe locations. Information and regulation signs would be posted at these access points. Accessible hunting blinds may be developed to make hunting accessible for hunters with mobility disabilities. Annual deer hunts will probably be necessary to prevent an overabundance of deer on the refuge. Depending on the level of hunter interest, and potential for crowding, the refuge may institute a permit system to assure safe and enjoyable hunter experiences. The refuge would cooperate with the Minnesota Department of Natural Resources in the establishment of hunting seasons and permit quotas as needed.

Waterfowl hunting opportunities are also very likely to be provided on much of the refuge. As we prepare a detailed Hunt Plan, we will identify which areas of the refuge would be open to migratory bird hunting, and identify parking and access points necessary to facilitate this use. However, the entire refuge would not be open at all times during the waterfowl hunting season. Federal law generally prohibits us from opening over 40% of a National Wildlife Refuge (acquired with the approval of the Migratory Bird Conservation Commission) to migratory bird hunting. The progress of wetland restoration, hunter access, bird numbers and habitat use will ultimately determine the areas open to hunting.

B. Fishing

The restored shallow wetland basins within the refuge will probably not support large populations of game fish. However, there may be some fishing potential and public desire to fish on refuge waters. Following completion of a Refuge Sport Fishing Plan fishing opportunities would be provided at suitable locations. The planning will be completed as soon as fish-bearing waters and public access points are acquired. The refuge staff would cooperate with the Minnesota DNR in all aspects of fishery improvements and restoration efforts.

C. Wildlife Observation & Photography

The refuge will contain scenic vistas of a vast prairie landscape. Wildlife inhabiting the restored habitats will include waterfowl, cranes, shorebirds and song birds. The combination of diverse wildlife and landscape beauty will create excellent wildlife observation and photography opportunities at several sites around the refuge.

Short hiking trails (with boardwalks as needed) and wildlife observation platforms and blinds would also be developed to immerse visitors into the tallgrass prairie landscape and wetland areas of the refuge.

The refuge staff would work with local communities and private conservation groups to develop special public wildlife celebrations, like International Migratory Bird Day, or Sandhill Crane celebrations. These events will help build community awareness and pride in the refuge and help provide an additional draw of visitors to the area.

D. Interpretation

The major interpretive themes for the proposed Glacial Ridge Refuge include these concepts: the tallgrass prairie ecosystem; the refuge's habitat restoration and management; the refuge's place in the National Wildlife Refuge System.

These themes will be the core messages of the refuge's interpretive program, and will be included in different forms of interpretive signs, leaflets, and exhibits.

Visitor Contact Station

A visitor contact station could be developed on the refuge, near a main highway access. This modest sized facility would contain information and exhibits about the refuge. This will be the first stop for most first time visitors. Space will be provided for: refuge staff; refuge orientation displays; interpretive exhibits and diorama's of local wildlife; an information desk; restrooms; a multipurpose room; and small interpretive bookstore sales area. Possible partnerships with local conservation groups and other state and Federal conservation agencies could allow this visitor contact station to serve as an information station for people interested in learning about other wildlife and natural resources of the Glacial Ridge area.

Interpretive Wayside

Interpretive signs will be provided at the key wildlife observation areas, and hiking trails. These signs will reinforce the refuge's interpretive themes and provide site specific information that will help the visitor appreciate the refuge's resources.

Interpretive Trail

During a more thorough refuge planning and site analysis, process sites will be identified for the development of interpretive loop trails. These trails would include interpretive signs, or leaflets, keyed to landscape and wildlife features.

Environmental Education

The refuge staff will seek partnerships with local school districts, state and local organizations to provide site-based learning about conservation, and the restoration of habitat for wildlife and people. Outdoor classroom sites would be developed for the delivery of environmental education lessons and activities. Partnership projects could include hosting teacher workshops and youth leader programs. Activities would be coordinated closely with local schools to be sure any activities offered by the refuge would assist the teachers/students with meeting graduation standards or required curriculum components.

Wilderness Review

Lands within the proposed boundaries of the Glacial Ridge National Wildlife Refuge have been reviewed for wilderness suitability as part of the ICCP process. No lands were found suitable for designation as Wilderness as defined in the Wilderness Act of 1964. The study area does not presently contain 5,000 contiguous roadless acres nor does the proposed refuge have any units of sufficient size to make their preservation practicable as Wilderness. The lands of the refuge have been substantially affected by humans, particularly through agriculture.

Refuge Regulations and Enforcement

Because the proposed Glacial Ridge National Wildlife Refuge, like the other 500+ existing refuges, are places where the needs of wildlife come first, some general public uses allowed on other public lands are not appropriate on a refuge, and will not be allowed. The following regulations are typical of most National Wildlife Refuges and are published in the Code of Federal Regulations:

- Vehicles are only allowed on designated roads.
- Camping is not allowed.
- Camp or cooking fires are not allowed.
- Some wildlife sensitive areas may be seasonally closed to all public entry and use.
- Horseback riding on refuge trails is not allowed.
- Snowmobiles on refuge trails are not allowed.
- Refuge use is limited to daylight hours only.
- Possession or discharge of firearms is prohibited except during established hunting seasons in areas open to hunting.
- Dogs and pets must be kept on leash (except while hunting).
- Disturbing or collecting plants or animals is prohibited except under special permit.
- Searching for, or removal of objects of antiquity or historical importance is not allowed except under permit.

The enforcement of refuge regulations is important to safeguard resources and to protect visitors. Two or more refuge staff generally have law enforcement authority and work in close cooperation with state conservation officers, and other local enforcement agencies.